## **REMARKS**

Claims 1-33 are pending in this application. By this Amendment, claims 3, 4, 5, 7, 9, 10, 11, 14, 15, 19, 20, 21, 25, 27, 28, 30, 31, 32, and 33 are amended to delete multiple dependency. No new matter is contained in the amendments.

Please charge any fee deficiency or credit any overpayment to Deposit Account No. 01-2300.

Respectfully submitted,

Robert B. Murray

Registration No. 22,980

ARENT FOX KINTNER PLOTKIN & KAHN, PLLC 1050 Connecticut Avenue, N.W., Suite 600

Washington, D.C. 20036-5339

Tel: (202) 857-6000 Fax: (202) 638-4810

## MARKED-UP VERSION OF ORIGINAL CLAIMS

- 3. (Amended) The method as claimed in claim 1 [or 2,]characterized in that the channels are arranged on at least one support surface.
- 4. (Amended) The method as claimed in <u>claim 1</u> [any of claims 1 to 3,] characterized in that the support comprises a large number of channels which are preferably arranged parallel to one another.
- 5. (Amended) The method as claimed in <u>claim 1</u> [any of claims 1 to 4,] characterized in that the receptors are selected from nucleic acids and nucleic acid analogs.
- 7. (Amended) The method as claimed in <u>claim 1</u> [any of claims 1 to 4,] characterized in that the receptors are selected from polypeptides.
- 9. (Amended) The method as claimed in <u>claim 1</u> [any of claims 1 to 8,] characterized in that the illumination takes place via a programmable light source matrix.
- 10. (Amended) The method as claimed in <u>claim 1</u> [any of claims 1 to 9,] characterized in that the pattern of polymeric receptors is determined by computer programming.
- 11. (Amended) The method as claimed in <u>claim 1</u> [any of claims 1 to 10,] characterized in that the support is used for determining analytes in a sample.
- 14. (Amended) The method as claimed in <u>claim 12</u> [any of claims 12 to 14,] characterized in that the analyte is removed again from the support after the determination.

- 15. (Amended) The method as claimed in <u>claim 12</u> [any of claims 12 to 14,] characterized in that a plurality of the synthesis/analyte determination cycles is carried out, with the receptors for a subsequent cycle being synthesized on the basis of the information from a preceding cycle.
- 19. (Amended) The method as claimed in <u>claim 12</u> [any of claims 12 to 18,] characterized in that a planar support is used.
- 20. (Amended) The method as claimed in <u>claim 12</u> [any of claims 12 to 18,] characterized in that a support with a large number of channels is used.
- 21. (Amended) The method as claimed in <u>claim 12</u> [any of claims 12 to 20,] characterized in that a plurality of supports is used for a synthesis/analyte determination cycle.
- 25. (Amended) The method as claimed in claim 23 [or 24,] characterized in that a reagent kit comprising the support and building blocks for synthesizing polymeric receptors on the support is employed.
- 27. (Amended) The method as claimed in claim 13 [or 26,] characterized in that the apparatus additionally comprises electronic control means.
- 28. (Amended) The use of the method as claimed in <u>claim 1</u> [any of claims 1 to 27] for the sequencing of nucleic acids.
- 30. (Amended) The use of the method as claimed in <u>claim 1</u> [any of claims 1 to 27,] for obtaining diagnostic information for individual patient management such as, for example, the individual effect of pharmaceuticals.
- 31. (Amended) The use of the method as claimed in <u>claim 1</u> [any of claims 1 to 27,] for analyzing the effect of pharmacological substances.

- 32. (Amended) The use of the method as claimed in <u>claim 1</u> [any of claims 1 to 27] for setting up and analyzing substance libraries.
- 33. (Amended) The use of the method as claimed in <u>claim 1</u> [any of claims 1 to 27] for comparing individuals in a population.